

# DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS 3280 RUSSELL ROAD QUANTICO, VIRGINIA 22134-5103

MCO 1771.1A MRC 15 Jun 99

#### MARINE CORPS ORDER 1771.1A

From: Commandant of the Marine Corps

To: Distribution List

Subj: COLLECTION OF DEOXYRIBONUCLEIC ACID (DNA) REFERENCE

SPECIMENS TO AID IN REMAINS IDENTIFICATION

Encl: (1) Guidelines for Specimen Collection and Processing

(2) Privacy Act Statement

1.  $\underline{\text{Purpose}}$ . To publish policy and instructions concerning Marine Corps collection of DNA reference specimens to aid in remains identification.

2. <u>Cancellation</u>. MCO 1771.1.

## 3. Background

- a. The Assistant Secretary of Defense for Health Affairs (ASD (HA)) instituted policies and requirements for the use of DNA analysis to aid in the identification of remains and establish a registry to carry out those policies. This Order implements the provisions of those policies.
- b. The use of modern weapons may result in circumstances where the classical technique of remains identification by fingerprint comparison and dental or medical radiographic analysis are not possible. The technique of DNA profile analysis has been employed in both the civilian and military communities to assist in the process of remains identification. DNA takes advantage of genetic markers that are unique to individuals, and are found in nearly every cell of the body.
- c. The ASD (HA) established the DoD Registry and Specimen Repository for remains identification. The establishment of the DoD DNA Registry and Specimen Repository does not preclude the need for other procedures for remains identification such as fingerprint comparison, serological analysis, or medical and

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dental radiograph comparisons. Each of these procedures should be utilized to the greatest extent possible in ensuring the accurate identification of remains and the expeditious return of remains to the next of kin for disposition or interment.

d. The establishment of the DoD Registry and Specimen Repository is to be used to facilitate remains identification. Requests for access to the Registry or Specimen Repository for purposes other than remains identification purposes shall not, ordinarily, be approved. In extraordinary cases, when no reasonable alternative means of obtaining a specimen for DNA profile analysis is available, a request for access to the DoD Registry and Specimen Repository shall be routed through the appropriate Secretary of the military department, or his/her designee, for approval by the ASD (HA).

#### 4. Action

- a. The CMC is responsible for ensuring that DNA specimens are collected from all Marine Corps personnel.
- b. Individual unit commanders are responsible for ensuring that DNA specimens are collected from all personnel within their respective commands. Commanders will ensure that this collection is complete and that DNA specimens have been collected from all personnel prior to deployment into a hostile fire or imminent danger zones. Verification that a specimen has been provided, and is on file at the repository, can be accomplished by the following:
  - (1) querying the local DEERS Database; or
- (2) sending an ASCII text file with name and Social Security Number (nine digits, no spaces/hyphens) of each member in the command directly to the Repository at the e-mail address: AFRSSIR@afip.osd.mil.
- c. There are a portion of specimens that are received at the repository and rejected because of incomplete or missing/wrong information or insufficient sample. Such specimens will not be accepted into the system. Therefore, unverified annotations in health records should not be considered sufficient evidence that a specimen is on file at the Repository. When a specimen has been verified as being on file at the DNA Repository utilizing the methods in paragraph 4.b., unit commanders should work closely with medical personnel to ensure that a stamp reading "DNA VERIFIED ON FILE THIS DATE" is annotated in the health

record next to the entry where the original specimen collection was recorded. This entry will eliminate the requirement for multiple checks and has been approved by the Bureau of Medicine and Surgery (BUMED) who will disseminate this requirement to all appropriate medical personnel.

- d. Medical Officers are responsible for ensuring that medical personnel within their units are adequately trained in specimen collection and shipment.
- e. Unit commanders, Active and Reserve, will incorporate DNA specimen collection into their training and operational preparation schedules. Unit commanders will ensure that the Repository's Database or the DEERS Database is queried throughout the year to ensure that all personnel in the command are current with a sample on file.
- f. Commander, Marine Forces Reserve (COMMARFORRES) is responsible for ensuring that all Reserve Marines have samples on file. Additionally, COMMARFORRES is responsible for ensuring that DNA specimens have been collected from all Reserve personnel prior to deployment into a hostile fire or imminent danger zone.
- g. The MARFORRES Health Service Support (HSS) is responsible for ensuring that medical personnel within Reserve units are adequately trained in specimen collection and shipment.

#### 5. Policy, Procedures and Waiver Requirements

# a. Policy

- (1) The Assistant Secretary of the Navy has established a deadline for DNA specimens to be collected and placed on file with the Repository for Active Duty and Reserve personnel serving on active duty as of 30 September 1998. Unit commanders will continue to screen personnel to ensure that all Active Duty personnel have completed this task. A specimen will be placed on file for the remainder of the Reserve component no later than 31 December 2002.
- (2) Specimen collection will proceed in accordance with the following plan:
- (a) A DNA specimen will be collected from all newly enlisted Marines during in-processing at the Marine Corps Recruit Depots. A DNA specimen will be collected from all newly

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commissioned Marine officers while attending The Basic School. A DNA specimen will be collected from all midshipmen at the U.S. Naval Academy or Naval Reserve Officers Training Corps (NROTC) during pre-commissioning physicals.

- (b) Specimens will be collected from all personnel during their 5-year physical examination, if a DNA sample is not already on file.
- (c) Specimens will be collected from members of the Selected Marine Corps Reserve (SMCR) during the annual training cycle, if a DNA sample is not already on file.
- (d) Specimens will be collected on Active Duty/Reserve members that currently do not have a DNA sample on file with the Repository when identified by unit commanders or the CMC (MRC).

#### b. Procedures

- (1) Specimen collection kits can be requisitioned through the local Naval Hospital or by contacting the Repository directly.
- (2) Specimen collection and processing must be conducted using care to prevent contamination of the specimen and to ensure accuracy of personal information that is placed on the form. Detailed instructions are contained in enclosure (1).

## c. Waiver Requirement Based on Religious Accommodation

- (1) Waivers to the mandatory DNA specimen sample requirement may be granted by the CMC.
- (2) Waiver requests will be submitted to the CMC Attn: Deputy Chief of Staff for Manpower and Reserve Affairs (DC/S, M&RA) who is the waiver authority for the Marine Corps. When determining whether to grant a request for a waiver on religious grounds, consider the five factors contained in DoDDir 1300.17, and the following guidance:
- (a) Regarding the importance of the military requirement, the Armed Forces DNA Repository is designed to carry out the military need to quickly and accurately identify remains of servicemembers. The Repository fulfills a particularly strong purpose for servicemembers assigned to combat units and hazardous duty positions, or who are in a deployment status.

- (b) Regarding the religious importance of the accommodations to the requester, emphasis should be placed on evidence, particularly that provided by third parties, of the member's well-established adherence to religious beliefs that conflict with the provision of specimen samples to the DNA Repository. Also, consider that the overriding use of the specimen sample in the Repository is for the identification of remains, that DNA analysis is not conducted on the specimen unless necessary for identification of remains or for other narrowly defined purposes, and that the specimen sample will be destroyed at the request of the member upon completion of military service.
- (c) Regarding the cumulative impact of repeated accommodations of a similar nature and previous treatment of similar requests, consider whether granting an accommodation sets precedent that could adversely impact other DoD medical policies and programs including mandatory pre-deployment processing, medical screening activities, HIV testing, and medical surveillance program serum collection.
- 6. <u>Refusal to Provide a DNA Specimen</u>. This is a punitive order. Failure to obey the provisions of this Order may result in administrative or disciplinary action.
- 7. Privacy Act Statement. Pursuant to section 552a(e) of Title 5 U.S. Code, a copy of enclosure (2) shall be provided to all Marine Corps personnel upon the collection of DNA specimens.
- 8. <u>Reserve Applicability</u>. This Order is applicable to the Marine Corps Reserve.

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#### GUIDELINES FOR SPECIMEN COLLECTION AND PROCESSING

#### 1. <u>Kit Procurement</u>

- a. A DNA specimen collection kit consists of a bloodstain card, shipping pouch, and a desiccant packet. In addition, included with the collection kits are self-addressed mailing envelopes and drying racks. Available upon request are 6" X 8" transfer pouches, fingerstick devices, alcohol swabs, and pencils. Collection supplies are available in either individual packets or in bulk quantities for collection ease.
- b. All unique collection supplies used in collecting DNA specimens must either be provided by the Armed Forces Repository of Specimen Samples for the Identification of Remains (AFRSSIR) or approved by the AFRSSIR before use in the DNA collection procedure (specific requirements in fiber composition of the bloodstain card preclude the use of any substitutes).
- c. Supply orders are processed by the AFRSSIR Contract Ordering Officer. Supply requests are normally filled within 30 days of the order being placed. If an order has not been received within 30 days, contact the Ordering Officer for assistance at the AFRSSIR telephone numbers listed in paragraph 3.

#### 2. Personal Data Collection

a. Before the DNA blood specimen is deposited onto the card, the servicemember, deploying civilian, or civilian contractor using a #2 pencil or ball point pen (do not use felt tip or fountain pens) must complete all information in the proper format on the bloodstain card, and carefully blacken the appropriate blocks corresponding to the social security number (SSN) and branch of service. The AFRSSIR requests that letters and numbers be made as close to the examples on the bloodstain card as possible. Bloodstain cards should not be discarded if the individual cannot make the alpha/numeric characters as depicted in the example. As a general rule, if collection personnel can read and decipher the individual's name, SSN, date of birth, collection date, and branch of service, then it can be assumed that AFRSSIR personnel can do the same. If collection personnel cannot decipher the individual's writing, then the bloodstain card must be discarded and the bloodstain card process repeated.

- b. Have the specimen donor sign the card (not the individual collecting the specimen) using either a #2 pencil or ball point pen (do not use felt tip or fountain pens). Ensure that the signature corresponds to the name the individual places on the front of the bloodstain card.
- c. Verify that all information is correct and complete on the bloodstain card using either a personnel roster or the individual's identification card.
- d. Reserve and Guard servicemembers must list their branch of service as USA, USMC, USN, or USAF. Do not select the title Other.
- 3. <u>Blood Specimen Collection</u>. Armed Forces Institute of Pathology (AFIP) personnel can provide on-site training in specimen collection and processing to major commands. This training can be arranged by calling commercial: (301) 319-0366 or DSN 285-0366. NOTE: When collecting blood on the bloodstain card, ensure that you do not cross contaminate the card with the blood from another individual. This will interfere with the DNA identification process. Ensure that all work surface areas, gloves, and other supplies are clean and free of blood and/or body fluids before proceeding with another collection.

#### a. <u>Bloodstain</u>

(1) Fingerstick Method. Place the bloodstain card with the filter paper containing the printed circles facing up. Before any fingerstick is attempted, ensure that the area pricked on the individual's finger is cleansed thoroughly with an alcohol swab. Prick any finger except the right index finger, using the fingerstick device provided in the collection supplies. Each fingerstick device is designed to be used only once for safety purposes. Extra fingerstick devices will be furnished to ensure that collection personnel have enough devices on hand to complete the collection. Squeeze the pricked finger to produce droplets of blood. Touch the blood droplets to the appropriate circled areas of the bloodstain card so that the circled areas are at least half covered with blood. If more than one fingerstick is necessary, use a different finger for each stick until both circles are at least 50% covered with blood.

# b. <u>Venipuncture Method</u>

- (1) Prior to venipuncture, ensure that the vacutainer tube bears the name and SSN identifiers specific to the servicemember, deploying civilian, or contractor who is providing the blood specimen. Using standard sterile venipuncture techniques, draw the blood into a purple-top vacutainer tube which contains only Ethylenediaminetetraacetic Acid (EDTA). No other type of vacutainer shall be used. The AFRSSIR offers a 6" X 8" transfer pouch that can be used to keep an individual's bloodstain card and vacutainer of blood together. The use of this pouch will facilitate keeping a servicemember's collection material together until it can be spotted. Do no send vials of whole blood with specimen cards to the AFRSSIR. The specimen card must be spotted with blood prior to submission to the AFRSSIR. After spotting the specimen card, discard the tube/blood draw instruments in accordance with standard universal precautions concerning biohazard waste.
- (2) To transfer blood from the vacutainer tube, place the bloodstain card with the filter paper side containing the printed circles face up. Ensure that the name and SSN on vacutainer tube matches the donor card. Take precautions to prevent splatter or surface contamination, then remove the top of the vacutainer. For personal protection, if available, laboratory blood splatter shields should be used. Using a standard plastic disposable transfer pipette, place four drops of blood in the center of each circled area on the bloodstain card. Allow the blood to migrate throughout the circle to completely fill the circled area (for difficult blood draws, attempt to fill at least 50% of the circled area). If required, additional blood droplets may be applied to fill the circle. It is acceptable to have blood outside the designated circles. Once the blood transfer is completed, dispose of the remaining blood vacutainer and pipette in an approved biohazard container. Do not reuse the plastic transfer pipette.
- c. Drying the Bloodstain Card: After affixing the blood to the bloodstain card, allow the blood to dry using the drying racks furnished by the AFRSSIR. NOTE: Do not stack the bloodstain cards or touch the bloodstained areas of the card while transferring the cards to the drying racks. Ensure that gloves and all surfaces of the drying racks are clean and free of blood or other body fluids. While placing the cards into the drying rack, ensure that the wet bloodstained ends do not come

into contact with the other cards. This can be accomplished by alternating the bloodstained end of the card on the left and right sides of the drying rack.

# 4. Specimen Assembly and Shipment

- a. Once the bloodstain card has dried, remove one bar code label from the individual's bloodstain card and place it in the appropriate block on the side of the card that contains the blood pad circles. NOTE: To prevent bacterial growth, do not seal the bloodstain card in the plastic shipping pouch until it has dried completely. A minimum of 20 minutes is required. One hour is more than sufficient.
- b. The remaining bar code labels can be used to identify the vacutainer tube of blood or the 6" X 8" transfer pouch. It does not matter which alpha character (A-C) is placed on the bloodstain card.
- c. Separate and discard the instructions and any remaining unused bar codes from the bloodstain card by tearing along the perforation. NOTE: If the filter paper containing the bloodstain is separated from the donor's identification portion of the card, the card is invalid and another specimen card must be completed. It is unacceptable to reattach the bloodstained filter paper to the card with tape, staples, or by any other means.
- d. Place the bloodstain card, with a desiccant packet, into the shipping pouch. Place the blood spotted end of the card into the pouch first. To prevent bulging, excess air should be removed by using gentle hand pressure over the pouch prior to sealing. Heat sealing the pouch is preferable. A heat sealer can be provided with the collection supplies upon request. If using a self-sealing pouch, seal the pouch by first folding the lip closure on the perforated line that is located approximately 1/4" from the opening of the pouch. Remove the tape from the lip of the pouch to expose the adhesive and fold the lip of the pouch along the perforated line so that the adhesive adheres to itself. Press along the adhesive to ensure proper closure.
- e. Place the sealed shipping pouches in the mailing pouch (maximum of 75 specimens per pouch) furnished with the collection kit. The use of other suitable mailing containers (i.e.,

cardboard boxes) is permitted and encouraged. If using cardboard boxes, it is not necessary to package the specimens in the mailing pouches. However, the box should be lined with a plastic bag. When ready for shipment, seal the box and place the furnished address label on the box. NOTE: Shipping box size should not exceed 16" X 16" X 18".

- f. Before sealing, place a sheet of paper in the shipping container with the following information:
  - (1) POC (individual responsible for specimen collection);
  - (2) POC Mailing Address;
  - (3) POC Telephone Number (commercial and DSN);
  - (4) POC Fax Number (commercial and DSN).
- g. It is not necessary to provide a list of donors with each shipment. The specimens can be mailed by the U.S. Postal Service or shipped by an express carrier. If shipment cannot be sent immediately, the shipment should be stored in a cool, dry environment away from direct heat. Specimens must be mailed within 10 days of collection. If stored under the above conditions, mail to the following address:

ARMED FORCES INSTITUTE OF PATHOLOGY ATTN: AFRSSIR 16050 INDUSTRIAL DRIVE, SUITE 100 GAITHERSBURG, MD 20877

5. Questions concerning additional collection kits, supplies or these collection instructions and techniques should be directed to the AFRSSIR at commercial (301) 319-0366 or DSN 285-0366. Facsimile is (301) 319-0369. Duty hours are weekdays 0630 - 1530 (EST).

#### PRIVACY ACT STATEMENT

- 1. <u>Authority</u>. Title 5 U.S.C. 301; 10 U.S.C. 176, 177, and 3012; E.O. 3012; Deputy Secretary of Defense memo dated 16 Dec 91; Assistant Secretary of Defense (Health Affairs) memo dated 5 Jan 93.
- 2. <u>Principal Purpose</u>. The records/information solicited will be used for the purpose of identification of human remains.
- 3. <u>Routine Uses</u>. In addition to being used within the Departments of the Navy and Defense for the purpose indicated above, the records/information may be provided to Federal, State, Local, and foreign authorities when the Armed Forces Institute of Pathology is requested to identify human remains. The "Blanket Routine Uses" established by the U.S. Army, U.S. Navy, and U.S. Marine Corps do not apply to such records/information.
- 4. Mandatory/Voluntary Disclosure: Consequences Of Refusing To Disclose. Disclosure of the solicited records/information is mandatory under Marine Corps Order 1771.1A. Refusal to disclose such records/information will subject an individual to possible administrative or disciplinary action.